

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY


(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

REC'D 03 OCT 2005

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Applicant's or agent's file reference 63012A	FOR FURTHER ACTION See Form PCT/IPEA/416	
International application No. PCT/US2004/017447	International filing date (day/month/year) 02.06.2004	Priority date (day/month/year) 10.06.2003
International Patent Classification (IPC) or national classification and IPC C08L23/04, C08L23/08, C08J5/18, B32B27/32		
Applicant DOW GLOBAL TECHNOLOGIES INC.		
<p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 6 sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p>a. <input checked="" type="checkbox"/> sent to the applicant and to the International Bureau a total of 18 sheets, as follows:</p> <p><input type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p>b. <input type="checkbox"/> (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) , containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p>		
<p>4. This report contains indications relating to the following items:</p> <p><input checked="" type="checkbox"/> Box No. I Basis of the opinion</p> <p><input type="checkbox"/> Box No. II Priority</p> <p><input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p><input type="checkbox"/> Box No. IV Lack of unity of invention</p> <p><input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p><input checked="" type="checkbox"/> Box No. VI Certain documents cited</p> <p><input checked="" type="checkbox"/> Box No. VII Certain defects in the international application</p> <p><input checked="" type="checkbox"/> Box No. VIII Certain observations on the international application</p>		
Date of submission of the demand 08.04.2005	Date of completion of this report 29.09.2005	
Name and mailing address of the International preliminary examining authority:  European Patent Office - P.B. 5818 Patentlaan 2 NL-2280 HV Rijswijk - Pays Bas Tel. +31 70 340 - 2040 Tx: 31 651 epo nl Fax: +31 70 340 - 3016	Authorized Officer Droghetti, A Telephone No. +31 70 340-4143	



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Box No. I Basis of the report

1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
- ☐ This report is based on translations from the original language into the following language , which is the language of a translation furnished for the purposes of:
- ☐ international search (under Rules 12.3 and 23.1(b))
 - ☐ publication of the international application (under Rule 12.4)
 - ☐ international preliminary examination (under Rules 55.2 and/or 55.3)
2. With regard to the **elements*** of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:

Description, Pages

1-24 as originally filed

Claims, Numbers

1-23 received on 11.04.2005 with letter of 08.04.2005

Drawings, Sheets

1/15-15/15 received on 11.04.2005 with letter of 08.04.2005

☐ a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing

3. ☐ The amendments have resulted in the cancellation of:
- ☐ the description, pages
 - ☐ the claims, Nos.
 - ☐ the drawings, sheets/figs
 - ☐ the sequence listing (*specify*):
 - ☐ any table(s) related to sequence listing (*specify*):
4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
- ☐ the description, pages
 - ☐ the claims, Nos.
 - ☐ the drawings, sheets/figs
 - ☐ the sequence listing (*specify*):
 - ☐ any table(s) related to sequence listing (*specify*):

* If item 4 applies, some or all of these sheets may be marked "superseded."

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Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	
	No: Claims	1-23
Inventive step (IS)	Yes: Claims	
	No: Claims	1-23
Industrial applicability (IA)	Yes: Claims	1-23
	No: Claims	

2. Citations and explanations (Rule 70.7):

see separate sheet

Box No. VI Certain documents cited

1. Certain published documents (Rule 70.10)

and / or

2. Non-written disclosures (Rule 70.9)

see separate sheet

Box No. VII Certain defects in the international application

The following defects in the form or contents of the international application have been noted:

see separate sheet

Box No. VIII Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

see separate sheet

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Re Item V

Reference is made to the following documents:

D1: WO A 98/21274

D2: WO A 01/32771

D3: US A 5677383

D4: US B 6566446 (cited by the applicant)

1. The amended set of claims 1-23 filed with letter dated 05.04.2004 is allowable in view of Article 34(2)(b) PCT.

2. Novelty (Art. 33(2) PCT)

The subject-matter of claims 1-23 is not novel in view of the prior art documents D1-D4, for the following reasons.

In D1-D4 ethylene polymer blends for films and film layers are disclosed, wherein the same ethylene polymers as claimed are comprised (A and B in the present application, that is homogenously and heterogenously branched ethylene polymers)(search report).

Since the density, MI and MWD ranges of the ethylene polymer components in the blend in D1-D4 are the same as claimed (see search report), it can be supposed that a blend as in the present application (having melt index and heat-seal properties as claimed) can be prepared starting from the polymer components disclosed in D1-D4 as well.

Apparently (according to the prior art and to the examples on file) a blend having melt index lower than that of the first homog. component is achieved only if the MI of the second heterog. polymer is lower than that of the homogen. polymer as well. This feature is not specified in present claim 1, rendering the same not novel in view of the polymers and blends thereof described in D1-D4.

Thus the subject-matter of claims 1-23 cannot be regarded as novel in view of D1-D4

3. Inventive Step (Art. 33(3) PCT)

Being not novel, the subject-matter of claims 1-23 cannot be regarded as inventive either in view of D1-D4.

4. The subject-matter of claims 1-23 meets the requirements of Article 33(4) PCT, with regard to industrial applicability.

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Re Item VI

Certain published documents

Application No Patent No	Publication date (day/month/year)	Filing date (day/month/year)	Priority date (valid claim) (day/month/year)
PCT/US2004/002329	26/08/2004	28/01/2004	4/02/2003

Re Item VII

Contrary to the requirements of Rule 5.1(a)(ii) PCT, the relevant background art disclosed in the documents D1-D4 is not mentioned in the description, nor are these documents identified therein.

Re Item VIII (Art. 6 PCT)

1. It is clear from the description on page 11, lines 1-4, and from the examples on file that a heterogeneous ethylene polymer having the MI index lower than that of the homogenous ethylene polymer is an essential feature to the definition of the invention:

Since independent claim 1 does not contain this feature it does not meet the requirement following from Article 6 PCT taken in combination with Rule 6.3(b) PCT that any independent claim must contain all the technical features essential to the definition of the invention.

2. The standard methods for measuring the MWD and the I_2 should be mentioned in the claims (page 7).

3. The units inch, °F, mil, psi, lb employed in the description are not additionally expressed in terms of the units stipulated by Rule 10.1/(a)/and/(b) PCT.

4. Claims 5 and 21 do not meet the requirements of Article 6 PCT in that the matter for which protection is sought is not clearly defined. The claims attempt to define the subject-matter in terms of the result to be achieved, which merely amounts to a statement of the underlying problem, without providing the technical features necessary for achieving this result.

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5. Claim 10,12,14-18,22,23 do not meet the requirements of Article 6 PCT in that the matter for which protection is sought is not clearly defined. The expression "the improvement" renders the claims unclear in that it is not possible to define the category of the same (e.g. product claims referring to the composition).